OR-26

ACID-CATALYZED REARRANGEMENT OF FURYL-TETHERED OXIMES: SYNTHESIS OF FUNCTIONALIZED PYRROLES

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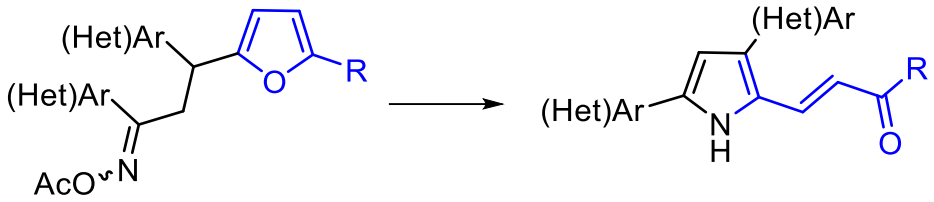
Polyarylated pyrroles have extensively utilized as building-blocks in material science[1]. High demand for functionalyzed pyrrole substrates motivated us to develop a general synthetic protocol toward such valuable compounds based on furan dearomatization approach[2].

We report here a novel dearomatizative rearrangement of furyl-tethered oxime esters under acidic conditions that provides 2,4-di(het)arylpyrroles possessing highly reactive acylvinyl fragment.



Scheme 1. Synthesis of functionalized pyrroles

Scope and limitations of the described protocol as well as further synthetic applications of the obtained products will be discussed.

References

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